IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

INTELLECTUAL VENTURES I LLC AND INTELLECTUAL VENTURES II LLC, *Plaintiffs,* v. HONDA MOTOR CO., LTD., ET AL., *Defendants.*	**Civil Action No. 2:21-cv-00390-JRG-RSP** (Lead Case)
INTELLECTUAL VENTURES I LLC AND INTELLECTUAL VENTURES II LLC, *Plaintiffs,* v. TOYOTA MOTOR CORP., ET AL. *Defendants.*	**Civil Action No. 2:21-cv-00389-JRG-RSP** (Member Case)

DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF

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I.   INTRODUCTION

Defendants Toyota Motor Corp, Toyota Motor North America, Inc., Toyota Motor Engineering & Manufacturing North America, Inc., and Toyota Motor Sales, U.S.A, Inc. (collectively, "Toyota" or "Defendants") submit their responsive claim construction brief.

The Court should adopt each of Toyota's proposed constructions, which are fully supported by the intrinsic evidence and are consistent with the PTAB's IPR institution decisions for the '283, '475, '008, '771, '466, '608, and '158 patents. (*See* Exs. A-H). Indeed, in some cases, Toyota is proposing the *very same* construction asserted by IV before the PTAB, yet IV is now inexplicably opposing those same constructions in this court. IV should not be permitted to ignore the arguments it made during these co-pending IPR proceedings. Those arguments are now part of the official file history and constitute relevant intrinsic evidence that must be weighed in construing the claims. *GREE, Inc. v. Supercell Oy*, No. 219CV00071JRGRSP, 2020 WL 2476497, at *7 (E.D. Tex. May 12, 2020) ("The Court treats patent-owner and PTAB submissions in an Inter Partes Review or Post Grant Review as intrinsic evidence.").

Toyota is also mindful of the claim constructions recently adopted by the Western District of Texas in *Intellectual Ventures I LLC v. General Motors Co.*, No. 6:21-CV-1088-ADA (W.D. Tex. Dec. 1, 2022) (the "GM case") where IV asserts all but one of the same patents against GM. *See* Ex. I, Memorandum in Support of Claim Construction Order. With minor exceptions, Toyota's proposed constructions are consistent with those adopted in the GM case.

II. THE DISPUTED CLAIM TERMS

A.   '283 Patent[1]

1.   "first address" (claims 1, 3, and 21)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
"a logical address that specifies the physical location of a control device, and a function-specific address associated with a subdivided component of the device"	Plain and ordinary meaning

The essential dispute is whether the claimed "first address" must include *both* a logical address and a function-specific address as IV argues, or whether it can include a logical address *and/or* a function-specific address. Toyota proposes that the plain and ordinary meaning of this term is sufficient because the patent does not use the term in any way contrary to its plain meaning and there is no evidence of disclaimer in the intrinsic record of an address that has a logical and/or a function-specific address. In its recent decision instituting the '283 patent IPR filed by Toyota, the PTAB declined to provide a construction for the "first address" term, although it provided reasoning consistent with Toyota's argument. *See* Ex. A, IPR2022-00970, Institution Decision at 8-14 (PTAB Dec. 9, 2022).

IV's requirement that the "first address" include *both* addresses contradicts the language of dependent claim 10 (which depends from claim 1) and independent claim 21. These claims require that the first address specify or comprise a "logical address ***and/or*** function-specific address." Yet, IV's construction requires "and" and excludes "or." As the PTAB stated in its institution decision, the language of claims 10 and 21 "provides a clear indication that the first address was not intended to be limited to being *both* a logical (physical) address *and* a function-

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[1] IV proposed construing "component" but did not address that term in its brief. "Component" should therefore be given its plain and ordinary meaning, consistent with Toyota's proposal.

specific address" as IV argues. Ex. A, IPR2022-00970, Institution Decision at 11 (PTAB Dec. 9, 2022).

IV points to a discussion of the "first address" and "second address" at 2:55-3:2 of the specification, but the second address being discussed there is unrelated to first addresses and does not inform whether the first address must have both a logical and functional address. IV's further reliance on exemplary embodiments does not show a clear disavowal of a first address that contains a logical address and/or a function-specific address. Indeed, IV's citation to 6:41-58 supports the idea that the first address *can* include a logical address and functional address, not that it must. Specifically, the passage states:

> Each control device 2 to 6 and every other component connected to the data bus 1 is assigned a first address which, on the one hand, *can* specify the physical location of the component and, on the other hand, also its functional association.

6:41-58 (emphasis added). Thus, there is no requirement that the first address *must* include both addresses as IV argues here. The word "can" is permissive, not mandatory.

IV next cites Figure 2, which likewise depicts how addresses *can* be stored with a logical and functional address in a central register, not how they *must* be stored. IV also cites the file history, where the examiner stated that "Applicant's attorney explained the invention and how the components *can* have logical as well as functional addresses," i.e., not that they *must* include both as IV argues. *See* IV Br. 3 (quoting IV's Ex. N, 6/30/04 Examiner Interview Summary (emphasis Toyota's)). In its institution decision, the PTAB considered and rejected these same citations, noting that "[t]he use of 'can' is consistent with the 'and/or' used in the claims to indicate that the first address may be either (1) a logical address, (2) a function-specific address, *or* (3) a logical address and a function-specific address." Ex. A, IPR2022-00970, Institution Decision at 12-13 (PTAB Dec. 9, 2022); *see also Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296,

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1306 (Fed. Cir. 2011) ("To disavow claim scope, the specification must contain 'expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.'") (citing *Epistar Corp. v. Int'l Trade Comm'n*, 566 F.3d 1321, 1335 (Fed. Cir. 2009)).

IV's construction should be rejected. It contradicts the intrinsic record and improperly imports limitations from the specification into the claims.

B.   '475 Patent

1.   "remote computing [device/system]" (claim 11)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning, no construction necessary	Plain and ordinary meaning, i.e., "remote computing device"
	Otherwise indefinite

Independent claim 8 of the '475 patent (from which claim 11 depends) recites sending an indication to "a remote computing *system*." The claim then recites "wherein *the* remote computing *device* is configured to notify a recipient." This "remote computing *device*" is never earlier recited in the claim, leaving ambiguous what "the" remote computing device is referring to. IV recognized this ambiguity in its IPR proceeding against Unified Patents, LLC, where it argued that the use of "remote computing system" was merely a "typographical error" and therefore "'remote computing system' should be interpreted as 'remote computing device.'" Ex. J, IPR2022-00429, Patent Owner's Preliminary Response at 36-37 (PTAB May 16, 2022). The PTAB agreed. Ex. C, IPR2022-00429, Institution Decision at 5 n.3 (PTAB Aug. 11, 2022). Now, however, IV objects to its own previous construction.

Given that "*the* remote computing *device*" undisputedly lacks antecedent basis, and given IV's newfound refusal to give this term any clarifying definition (a purely tactical decision on IV's part), the claim should be invalidated as indefinite. *Imperium (IP) Holdings, Inc. v. Apple, Inc.*,

920 F. Supp. 2d 747, 758 (E.D. Tex. 2013) (finding claims lacking antecedent basis to be indefinite "because the claim scope is not 'discernable' or 'reasonably ascertainable'") (citing *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008) ("We have also stated that a claim could be indefinite if a term does not have proper antecedent basis where such basis is not otherwise present by implication or the meaning is not reasonably ascertainable.")).

Otherwise, the Court should adopt Toyota's proposed construction.

2.   "recipient" (claim 11)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning, no construction necessary	Plain and ordinary meaning, i.e., "an individual who receives a notification"

In the IPR brought by Unified Patents, LLC, IV argued that "the phrase 'a recipient' recited in … the '475 Patent should be construed as a different *individual* than a 'driver of the vehicle.'" Ex. J, IPR2022-00429, Patent Owner's Preliminary Response at 31-36 (PTAB May 16, 2022) (emphasis added). While IV disputed what type of individual could receive the notification, it made clear that it must be an individual. *Id.* This is consistent with the claims, which require not that information merely be sent to a remote computing system, but also that a "recipient" be notified. *See* '475 patent at claim 8. This is also consistent with the specification, which states that a "recipient" includes "an employer" or "a parent" who is "*on a terminal*" and can thereby access information, for example, "via a conventional Internet browser, e.g., Microsoft™ Internet Explorer." '475 Patent at 10:23-31.

IV argues against any construction, providing no explanation for why its own prior construction before the PTAB, which acknowledged that a recipient is an individual, should be ignored. *Cf. GREE*, 2020 WL 2476497, at *7 (patent owner statements made during an IPR are part of the intrinsic record). Accordingly, the Court should adopt Toyota's proposed construction.

C.   '008 Patent

In its recent IPR institution decision for the '008 patent, the PTAB rejected *all* of the same

constructions IV proposes here. *See* Ex. D, IPR2022-00857, Institution Decision at 9-16 (PTAB

Dec. 5, 2022). Toyota proposes that the plain and ordinary meaning of the '008 patent terms is

appropriate and sufficient but would be willing to agree to the constructions adopted by the PTAB

in its institution decision which are addressed in the Institution Decision at 13, 15, and 16. *Id.*

1.   "gateway node" (claim 75)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
"a device that provides a bridge between heterogeneous networks"	Plain and ordinary meaning

As the PTAB recognized, the specification of the '008 patent describes "[s]ensor nodes

[that] self-organize to form a network, and seamlessly link to the Internet or other external network

via a gateway node, which *can be* of the same type or different from the sensor nodes." '008 Patent

at 5:40-43. There is no requirement in the specification that the networks being bridged by the

gateway *must be* heterogenous and certainly no clear disavowal of such claim scope. *See* Ex. D,

IPR2022-00857, Institution Decision at 15-16 (PTAB Dec. 5, 2022); *see also Retractable Techs.,*

653 F.3d at 1306 (noting that disavowal requires "expressions of manifest exclusion or

restriction") (citation omitted). IV's narrow and unsupported construction should be rejected.

2.   "application processor" (claim 75)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
"a non-real-time processor that is not involved in the routing of data packets that is shielded by the real-time interface processor (RTIP) from the real-time operations of the RTIP"	Plain and ordinary meaning

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The PTAB's recent institution decision also rejected IV's identical proposal for "application processor." *See* Ex. D, IPR2022-00857, Institution Decision at 13-15 (PTAB Dec. 5, 2022). IV's wordy and confusing construction imports extraneous negative limitations ("non-real-time," "not involved" and "shielded") that are not required in the specification. As the PTAB recognized, IV merely points to exemplary embodiments in the specification where the application processor might be "non-real-time" or "shielded from the real-time operations of the RTIP." *Id*. at 14. But it is improper to read these particular embodiments into the claim language absent a clear disavowal of claim scope which is not present. *See id*. (citing *Personalized Media Communications, LLC v. Apple Inc.,* 952 F.3d 1336, 1343 (Fed. Cir. 2020) ("a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.") (citation omitted)).

IV's construction also introduces further ambiguity to an otherwise straight-forward claim term. How slow must a processor be to be "non-real-time"? What does it mean to be "not involved" in routing data packets or "shielded" from operations of the RTIP? The plain and ordinary meaning of this simple term is sufficient. As the PTAB correctly recognized, IV's narrow construction should be rejected.

3.   "real-time interface processor" (claim 75)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
"a real time processor that performs the processing to filter and route packets to the appropriate destinations within the connected networks"	Plain and ordinary meaning

The PTAB also rejected IV's proposed construction of "real-time interface processor" (RTIP). *See* Ex. D, IPR2022-00857, Institution Decision at 11-13 (PTAB Dec. 5, 2022). As the PTAB recognized, the RTIP described in the specification performs exemplary functions like

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filtering and routing but need not be so limited. *Id.* at 11-12. The specification also describes the RTIP in different embodiments as potentially performing security functions, which IV omits from its construction. *See, e.g., id.* at 12 (citing '008 patent, 25:5–8). There is no basis for restricting the RTIP to the embodiments that IV "selectively identified," in the words of the PTAB. *Id.* IV's construction also requires the RTIP to filter packets to *plural* "destinations" within *plural* connected "networks," yet IV cites nothing to suggest that the patentee disclaimed an RTIP connected to a single downstream destination on a single connected network. Again, as the PTAB correctly recognized, IV's narrow construction should be rejected.

D.   '138 Patent

1.   **"wherein the selection of data occurs using a first iteration and second iteration" (claims 1 and 8)[2]**

IV's Proposed Construction	Toyota's Proposed Construction
Plain and ordinary meaning, no construction necessary	Plain and ordinary meaning, i.e., "wherein the selection of data occurs using a first repetition of an algorithm and a second repetition of the algorithm"

The parties dispute whether an "iteration" in the context of the '138 patent refers to a "repetition of an algorithm." Toyota respectfully submits that it does, and that the "first" and "second iterations" in independent claims 1 and 8 refer to the first and second repetitions respectively of the patent's algorithm.

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[2] IV also proposes the term "wherein in the first iteration, the selection of the data is selected from a subset of the plurality of radio bearers based on the received parameters." IV Br. at 12. But in its L.P.R. 4-1 disclosures, IV did not contend this term should be construed. *See* Ex. FF (IV 4-1 Disclosures). Toyota did, *see* Ex. GG (Toyota 4-1 Disclosures), but Toyota removed it from its terms for construction prior to the L.P.R. 4-2 exchange. *See* Ex. HH (Toyota Term Narrowing Email). Toyota does not believe that this term needs construction beyond clarifying the meaning of "iteration," as already discussed in this brief.

The only time the patent uses the word "iteration" is in reference to a full repetition of its scheduling algorithm. *See* '138 patent, 11:32-38. For instance, referring to Figure 6, the patent states: "Note that this algorithm is **iterative** and running_RAAU_delta is determined from the previous **iteration** of the algorithm." *Id.*, 11:32-34 (emphasis added). Because the '138 Patent limits the number of "queues" (or "radio bearers") that can transmit on each iteration of its algorithm, some queues will not get resources to transmit data even though they have buffered data to send. *Id.*, 11:34-38. The "running_RAAU_delta" variable increments on each iteration for each such queue to make that queue more likely to be selected for resource allocation on subsequent iterations. *Id.*, 11:22-31, 39-42 (noting (1) that the queues with the highest RAAUq' scores will be selected for resources allocation and (2) that each queue's RAAUq' is partially based on its running_RAAU_delta value from previous iterations); 12:17-27.

The specification considers the scheduling algorithm "iterative" even though the selection of data for transmission in different repetitions is based on different criteria. The running_RAAU_delta variable has not yet been incremented on the very first iteration of the algorithm, so the selection of queues is based solely on "weight" parameters that are received from the network. *Id.*, 9:53-60; 10:56-11:42. On the second iteration – and all subsequent iterations of the algorithm – the selection of queues will be based on the buffered data backlog for each queue as reflected by running_RAAU_delta *in addition to* also being based on the queue's weight parameter. *Id.*, 11:22-42. The patent calls out this distinction between the "first" and "second iterations" of its algorithm:

> "Although no limitation has been applied in the **first iteration**, on the **second iteration**, the limitation of the number of queues in the previous iteration has meant that there are some queues that did not receive the number of RAAU that were originally determined."

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See '138 patent, 11:34-38 (emphasis added); Fig. 6. In sum, the '138 patent shows that the "first" and "second iterations" are (1) repetitions of its scheduling algorithm, and (2) these two iterations select data queues based on different criteria.

Extrinsic evidence confirms the plain meaning of "iteration" to be "repetition," especially in the computational context. Merriam Webster Dictionary calls an "iteration" a "REPETITION; *esp* [especially]: a computational process in which a series of operations is repeated until a condition is met" or, alternatively, "one repetition of the series of operations[.]" Ex. K, 3-4. The Microsoft Encarta College Dictionary defines "iteration" as "**REPETITION** an instance or the act of doing something again." Ex. L, 3. And the American Heritage Dictionary defines "iteration" in the computer science space as "[T]he act or an instance of iterating, repetition . . . [o]ne cycle of a set of instructions to be repeated[.]" Ex. M, 3.

IV tries to resist Toyota's construction of "iteration" in two ways, neither of which is persuasive. First, it argues that the terms "'first iteration' and 'second iteration' are defined as having different requirements for the selection of the data" and therefore cannot refer to "repetitions" of an algorithm. IV Br. at 13. But as noted above, the patent explains that the first and second repetitions of the algorithm will select data based on different criteria. And IV's own expert has already agreed that the "first" and "second iterations" in the context of this same specification refer to repetitions of the scheduling algorithm. In IPR2022-00972 of the '466 patent, the direct parent of the '138 patent, IV's expert Dr. Gary Lomp *also* described the "first" and "second iterations" in the context of this specification as the first and second full repetitions of the scheduling algorithm shown in Figure 6. *See* Ex. N, IPR2022-00972, Patent Owner's Preliminary Response at 8-11 (PTAB Sept. 9, 2022) (citing IPR2022-00972, Ex. 2001 at ¶¶ 34-36).

Second, IV leans on the court's construction in the GM case, but there the court rejected a different construction than Toyota proposes here. IV Br. at 14. There, the court declined to construe this claim term as: "wherein the selection of the data occurs by repeating the same steps twice." Ex. I, Memorandum in Support of Claim Construction Order at 75-77. But Toyota's proposed construction here is not based on repeating "the same steps twice." The 138 patent's scheduling algorithm need not always repeat the exact same steps on each full repetition. It may fork after step 620 depending on the number of queues with resources allocated, *Id.*, 11:17-21, it may perform a conditional step 655, *Id.*, 11:62-66, or—importantly—it may adjust each queue's RAAUq' by that queue's running_RAAU_delta if the algorithm is on the second iteration or later. *Id.*, 11:22-38. Nevertheless, the '138 Patent still describes its algorithm as "iterative." '138 patent at 11:22-42. Thus, Toyota's construction is different from the construction that the GM court rejected, and is consistent with the specification.

IV tipped its hand on the true dispute over this term in IPR2022-01127 against the '138 patent. *See* Ex. O, IPR2022-01127, Patent Owner's Preliminary Response (PTAB Oct. 6, 2022). There, IV showed that it intends to argue that *different chunks* of the '138 patent's scheduling algorithm make up the claimed "first" and "second iteration." *Id.* at 6-11. IV drew a red box around steps 626-655 and a blue box around steps 660-665, claiming the former was the patent's "first iteration" and the latter was the patent's "second iteration." *Id.* at 7. IV's treatment—which it calls "plain and ordinary meaning"—effectively erases the word "iteration" and replaces it with "set of steps." That is not how the patent is written, however, and it is not how it should be applied at trial.

Because Toyota's construction clarifies what an "iteration" is in the context of the '138 patent in a manner that assists the jury, Toyota's construction should be adopted.

E.   '771 Patent

1.   **"Internet access," "access the Internet," and "access[ing] the Internet" (claims 1, 3, and 9)**

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning, no construction necessary	"the ability to send and/or receive information via the Internet"

Toyota proposes that this Court adopt the same constructions already adopted by the PTAB in a prior IPR filed by Motorola related to a prior IV litigation involving the '771 patent in the Southern District of Florida in 2013. Ex. P, IPR2014-00504, Final Written Decision at 11-12 (PTAB Sept. 9, 2015), *rev'd on other grounds*, 692 Fed. Appx. 626 (Fed. Cir. 2017). Toyota notes that in the present case, IV has *already agreed* to two of the other PTAB constructions from that same PTAB decision in the Motorola IPR, notably "a Local Area Network . . ." and "stand-alone system." *See* Joint Claim Construction and Prehearing Statement, Ex. A, ECF No. 95. For the "internet access" terms, the PTAB correctly recognized that the ability to *receive* information from the Internet, even without the ability to *send* information to the Internet, is a form of accessing the Internet. Ex. P, IPR2014-00504, Final Written Decision at 11 (PTAB Sept. 9, 2015); Ex. Q, IPR2014-00504, Final Written Decision on Remand at 11-12 (PTAB Mar. 13, 2020) (adopting constructions from the Final Written Decision on remand). The PTAB also pointed out that claim 1 of the '771 patent requires only a hotspot that "enables client devices . . . to access the Internet" and does not require or suggest that the client devices must both send *and* receive information from the Internet. *Id.* IV has failed to show any error in the PTAB's reasoning on this point.

Accordingly, Toyota's straight-forward construction, consistent with the prior PTAB construction should be adopted.

2.   "without the need to access an external service controller server" (claims 1 and 9)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning, no construction necessary	Plain and ordinary meaning, i.e., "without the need to connect to an external server before enabling a client device to access the internet"

The phrase "external service controller server" is not a term of art and appears nowhere in the specification of the '771 Patent. Instead, the parties agree that this term was added as a negative limitation to distinguish a prior art reference, Kokkinen, cited by the examiner during prosecution. *See* Ex. R, '771 File History, 11/30/07 Response to Office Action (amending claims in response to § 102(e) rejection over U.S. Patent Publication No. 2002/0073,240 ("Kokkinen")). Regarding the amendment, the applicants stated:

> Applicant has a LAN router 16 that connects the wireless access point 12 to the Internet Access Interface 42 which in Figs. 1 to 4 is a long-range wireless Internet Interface or WAN. There is no service controller or auxiliary server required as in Kokkinen. Applicant's system is, thus, capable of standalone operation unlike the system of Kokkinen. Claim 1 claims stand-alone operation as well as not having a requirement for an external server.

Id. at 9. Toyota's proposed construction is consistent with the applicants' explanation that the external service controller server is simply an external server required before Internet access is enabled. Toyota's construction further explains, again consistent with the applicants' statements, that the time at which the "need to access" the external service controller server is not necessary is the time at which the devices are connecting to the Internet.

Toyota's construction should be adopted because it is consistent with the applicants' comments made during prosecution to overcome Kokkinen, which is the sole intrinsic support for this limitation.

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F.   '356 Patent

1.   **"the processor is further configured to receive feedback information from a downlink control channel" / "receiving, by the UE, feedback information from a downlink control channel" (claims 1 and 22)**

Claim Term	IV's Proposed Construction	Toyota's Proposed Construction
"the processor is further configured to receive feedback information from a downlink control channel" (claim 1)	Plain and ordinary meaning, no construction necessary	"the processor is further configured to receive information in response to the signal sent over the uplink physical control channel from a downlink control channel"
"receiving, by the UE, feedback information from a downlink control channel" (claim 22)	Plain and ordinary meaning, no construction necessary	"receiving, by the UE, information in response to the signal sent over the uplink physical control channel from a downlink control channel"

Claims 1 and 22 of the '356 Patent recite that a user equipment (UE) sends two messages—(1) "a signal over the uplink physical control channel" and (2) "data over the physical uplink shared channel"—and receives "feedback information." The parties' dispute centers on which of the two sent messages the UE receives the "feedback information" in response to. Rejecting the same arguments that IV makes here, the Western District of Texas construed "feedback information" as Toyota proposes. Ex. I, Memorandum in Support of Claim Construction Order at 42-46. This Court should adopt the same construction, for the same reasons.

Toyota's proposed construction comports with the '356 Patent's description of the alleged invention. As even IV admits, the alleged invention is an active feedback control system in which the UE sends the base station a beacon signal (UL_Beacon) on an uplink physical control channel, and the base station feeds back power control commands to the UE on a downlink control channel (Physical Layer Control Channel (PLCCH)) based on the power received from the beacon signal.

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'356 Patent at 2:36-46, 4:35-40, 4:55-65; *see* Ex. S, IPR2022-01130, Patent Owner's Preliminary

Response at 3-5 (PTAB Oct. 5, 2022). The only feedback information that the '356 Patent discloses

is received by the UE in response to sending the UL-Beacon signal over the uplink physical control

channel. '356 Patent at 2:36-46, 4:35-40, 4:55-60; Ex. I, Memorandum in Support of Claim

Construction Order at 45. By contrast, the '356 Patent states that its feedback control system

operates independently of a physical uplink shared channel for sending data:

> Embodiments of the invention allow a terminal to transmit the
> uplink physical channel control signal (UL_Beacon) independently
> from the uplink physical channel. Therefore, the implementation of
> closed loop feedback may operate **in the absence of an uplink
> physical channel**. In one embodiment, a UE allocates a time slot for
> a beacon signal **separated from the time slots for data in a frame**.
> A second time slot is allocated within the frame for the base station
> to transmit a control signal in response to the beacon signal. The
> control signal instructs the UE to adjust a transmission parameter.

'356 Patent at 2:24-35 (emphasis added).

IV's no-construction-necessary position is unhelpful to the jury because it fails to address

the dispute regarding this term's scope, which the Court has a duty to resolve. *See O2 Micro Int'l

Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). IV's cited case holding

that "feedback" and "feedback information" did not require construction in a different context, *see*

IV Br. 17, is inapposite because the parties' dispute is tied to the specific context of the '356

Patent's claims. Moreover, contrary to IV's argument, rather than import an embodiment from the

specification, Toyota's proposed construction properly clarifies the meaning of "feedback

information" in the specific context of the '356 Patent's claims. *See U.S. Surgical Corp. v. Ethicon,

Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (the core purpose of claim construction is to clarify

claim scope).

Because Toyota's proposed construction provides needed clarity to this claim term and naturally aligns with the '356 Patent's description of the alleged invention, and because it is consistent with the court's construction in the GM case, it should be adopted.

G.   '466 Patent

1.   "first parameter"; "second parameter"; "third parameter" (claims 1 and 6)

IV's Proposed Construction	Toyota's Proposed Construction
Plain and ordinary meaning, no construction necessary	"first parameter" = parameter different than the second, third, and fourth parameters "second parameter" = parameter different than the first, third, and fourth parameters "third parameter" = parameter different than the first, second, and fourth parameters

The parties dispute whether the "second" and "third" parameters must be different parameters for a channel, as Toyota proposes, or can be the same parameter but for different channels, as IV contends.[3] Contrary to IV's position, the court in the GM case and the PTAB both construed the "second" and "third" parameters as different parameters for a channel, not merely the same parameter for a different channel. Ex. I, Memorandum in Support of Claim Construction Order at 66-68; Ex. F, IPR2022-00972, Institution Decision at 11-14 (PTAB Dec. 7, 2022). This Court should adopt the same construction, for the same reasons.

Independent claims 1 and 6 recite the "first," "second," and "third" parameters as separate and different claim terms. Dependent claims 3 and 8 recite a "fourth" parameter as yet another

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[3] IV agrees with Toyota that the claimed "first parameter" is a different parameter for a channel than the other recited parameters. IV Br. 19.

separate and different claim term.[4] As the Federal Circuit has consistently held, "[d]ifferent claim terms are presumed to have different meanings," and thus each of these claimed parameters is presumed to refer to a different parameter. *See Bd. of Regents of the Univ. of Tex. Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1371 (Fed. Cir. 2008); *Bushnell Hawthorne, LLC v. Cisco Systems, Inc.*, 813 Fed. App'x. 522, 526 (Fed. Cir. 2020) (construing "one or more IP addresses," "one or more second IP addresses," and "one or more third IP addresses" as referring to different IP addresses).

The claimed context confirms this presumption. First, claim 1 recites "wherein resources are allocated for data of each channel having a second parameter above zero. . . ." This claim language makes clear that each channel can have a second parameter, which in turn shows that the "third parameter" is a different parameter for each channel than the second parameter. As the court in the GM case and the PTAB observed, because the claim language refers to the second parameter of each of multiple channels, if the patentee intended to refer to that same parameter for yet another channel, the patentee would have referred to it as that channel's second parameter, not a separate third parameter. Ex. I, Memorandum in Support of Claim Construction Order at 66-67; Ex. F, IPR2022-00972, Institution Decision at 13 (PTAB Dec. 7, 2022).

Second, claim 1 recites that "the second parameter is derived from a first channel's first parameter and the third parameter is derived from a second channel's first parameter." This language shows that the "first parameter" is the same parameter for both the first and second channels. If IV were correct that claim 1 uses different parameter numbers to refer to the same

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4 Although the "fourth parameter" claim term is included in Exhibits B and C to the Joint Claim Construction chart, IV has since elected not to assert claims 3 or 8 in which it appears, or any claims depending therefrom. Accordingly, Toyota agrees that the "fourth parameter" claim term need not be construed.

parameter but for different channels, a person of ordinary skill would expect the claim to refer to a first channel's second parameter derived from a first channel's first parameter, and a second channel's third parameter derived from a second channel's parameter *with a different enumeration*. As the PTAB correctly observed, the absence of a different enumeration here shows that claim 1 does not use different parameter numbers to refer to the same parameter but for different channels. *See* Ex. F, IPR2022-00972, Institution Decision at 14 (PTAB Dec. 7, 2022). Thus, contrary to IV's argument, the "second" and "third" parameters do not refer to the same parameter but for different channels. *See* IV Br. 19. Instead, they refer to different parameters for a channel, as Toyota proposes.

Citing claim 3, IV incorrectly argues that "second" and "third" parameters are both derived from the "first" parameter, and therefore refer to the same parameter. *See* IV Br. 19. As the Western District of Texas found, however, "even when the second and third parameters are 'derived from' the first parameter, this does not mean that they derive from the first parameter in identical ways such that they are the same parameter." Ex. I, Memorandum in Support of Claim Construction Order at 67. Indeed, claim 3 specifies the different ways in which the second and third parameters are derived from the first parameter. "If the second and third parameter were the same parameter, there would be no need to specify two different parameters, the claim would simply refer to a single parameter." *Id*. at 67.

Finally, the specification further confirms the legal presumption that the "second" and "third" parameters refer to different parameters for a channel because, as the PTAB found, these claim terms map to different parameters in the specification. *See* Ex. F, IPR2022-00972, Institution Decision at 17-18 (PTAB Dec. 7, 2022) (concluding that Speight, a parent of the '466 Patent with

nearly identical specification, discloses RAAUq' as the "second parameter" and RAAUq" as the

"third parameter").

> **2.** **"wherein resources are allocated for data of each channel having a second parameter above zero prior to another channel's data for transmission having a third parameter less than or equal to zero" (claims 1 and 6)**

IV's Proposed Construction	Toyota's Proposed Construction
"wherein resources are allocated for a first set of data [before/prior to] any are allocated for a second set of data, where the first set of data is the data of each channel [of a radio bearer] having a second parameter above zero and the second set of data is another channel's data-for transmission having a third parameter less than or equal to zero"	Plain and ordinary meaning

Unlike the defendants in *Intellectual Ventures II LLC v. Sprint Spectrum L.P.*, No. 2:17-

CV-662-JRG-RSP (E.D. Tex.), Toyota here does not contend that this claim term dictates any

particular transmission sequence. *See* IV Br. 20-21. Thus, IV fails to identify any dispute here

requiring construction of this claim term.

> **H.** **'608 Patent**

> **1.** **"first user preference" (claims 1, 8, and 10)**

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning, which is "previously saved preference information" OR: "previously saved user preference information"	Plain and ordinary meaning

The phrase "first user preference" requires no construction. IV seeks not to construe the

term, but instead to insert a new requirement that the claimed preference be "previously saved."

But the Federal Circuit is clear that absent "disclaimer or lexicography" the court "do[es] not

import limitations from the specification into the claims." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372-1373 (Fed. Cir. 2014). IV provides no explanation or support for why the user preference cannot simply be "receiv[ed]" by the user rather than "previously saved." And indeed IV's proposal is inconsistent with the claims. For example, independent claims 1 and 8 explicitly distinguish "receiving" (e.g., "receiv[ing] a first user preference") from "storing" (e.g., "stor[ing], for a plurality of objects, a set of attributes"). '608 Patent at claims 1, 8. If the inventors had intended to limit the claims to a "previously saved" user preference, they would have recited a storage step not only for the "set of attributes" but also for the "first user preference."

The specification also does not support limiting the meaning of "first user preference" to "previously saved" information. The specification does not define "preference," nor does it disavow preferences that are not previously saved. *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 967 (Fed. Cir. 2022) ("We depart from the plain and ordinary meaning of claim terms based on the specification in only two instances: lexicography and disavowal."). For example, the specification provides embodiments in which a user preference is simply "selected," and results are provided. *See, e.g.*, '608 Patent, 15:5-25 ("It is appreciated that the information may be browsed in any of the known ways including, but not limited to, drill down menus or categorical menus. Based upon the user's determined location, the system may then provide results based upon the selected fields within a certain geographic distance."); Figs.11-12 (showing a categorical menu from which a user may select their preference to receive nearby results).

The claim language of other patents in the '608 Patent family also shows that the inventors did not intend to limit the '608 Patent claims to a "previously saved" user preference. For example, multiple patents in the family claim "*creating* a user preference profile" and/or "*storing* the user preference profile." Ex. T, U.S. Patent No. 7,071,842, Claims 1, 15, 16; Ex. U, U.S. Patent No.

7,589,628, Claims 1, 15 (emphasis added). Other family patents claim "*access[ing]* a user preference profile" Ex. V, U.S. Patent No. 8,102,253, Claims 1, 12; Ex. W, U.S. Patent No. 8,427,303, Claims 1, 10, 19, 23; Ex. X, U.S. Patent No. 8,680,985, Claim 1 (emphasis added). In the '608 Patent, however, the inventors did not claim "creating," "storing," or "accessing" a user preference profile, but merely "receiving a first user preference." It would be inconsistent to interpret "a first user preference" to require the use of "previously saved … information" as IV proposes. *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) (declining to narrow claim in child patent where claim language in grandparent and parent patent claims "show that [the applicant] purposefully sought in the [child] patent claim scope broader than the [scope of the parent and grandparent claims].").

IV's construction also injects ambiguity into the claims, as it refers to a temporal limitation—"previously" saved—with no explanation of *what* it is "previous" to. The claim as written has no temporal requirement related to the "first user preference," and IV's construction, in addition to adding unclaimed limitations, will also further complicate the claims and confuse the jury. *See, e.g.*, *Traxxas, L.P. v. Hobbico, Inc.*, No. 216CV00768JRGRSP, 2017 WL 4347709, at *20 (E.D. Tex. Sept. 29, 2017) (rejecting construction that "introduces unwarranted ambiguity into the claim language").

Further, the PTAB already rejected IV's proposed construction. Ex. G, IPR2022-00709, Institution Decision at 18 n.10 (PTAB Oct. 12, 2022). When IV suggested a meaning of "first user preference" to be "previously saved preference information," the PTAB responded that "the proposed construction appears to simply *add limitations* to the plain meaning of the term being construed," seeking to "further limit[] *preference* to information *previously saved*." *Id.* The PTAB

concluded that "[o]f course, it would be inappropriate to add a limitation to the plain meaning of [the] term" as IV failed to provide sufficient (or any) justification. *Id.*

Here, too, IV fails to provide sufficient justification for adding limitations to the plain meaning of "first user preference." IV's first argument that "[t]he specification contemplates 'profile *or* preferences' of the user" or "a 'preference portfolio'" (IV Br. at 22) fails to provide any reason for limiting the claims to previously saved preference information. And the Western District of Texas's construction of "first user preference" to which IV refers similarly does not support IV's argument for limiting "preference" to "previously saved" information. The construction included the phrase "previously saved" because it was not disputed between the parties in that case. Ex. Y, Defs.' Reply Claim Const. Br. at 15-16, *Intellectual Ventures I LLC v. Gen. Motors Co.*, No. 6:21-cv-01088 (W.D. Tex. Sept. 2, 2022) *(IV v. GM);* Ex. Z, Pls.' Sur-reply Claim Const. Br. at 18, *IV v. GM* (Sept. 23, 2022). Indeed, in its claim construction opinion, the court did not analyze the appropriateness of importing a "previously saved" limitation. Ex. I, Memorandum in Support of Claim Construction Order at 58, *IV v. GM* (Sept. 1, 2022). Therefore, The WDTX construction bears no relevance to the dispute between Toyota and IV here—whether the limitation "previously saved" should be imported into the term first user preference. Because IV has failed to provide any compelling justification for its construction, and because its argument is inconsistent with the specification, the claims, and related patents, IV's construction should be rejected.

2.   "receiv[ing] … a geographic area limitation" (claims 1 and 8)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning, no construction necessary	Plain and ordinary meaning, i.e., "a geographic area supplied by a user for limiting the search for matching objects"

	Alternatively "a geographic area supplied by a user" or "a geographic area limitation supplied by a user for limiting the search for matching objects"

Toyota's proposed construction in this proceeding is substantially identical to that proposed by IV to the PTAB just last month. There, IV stated "a person of ordinary skill in the art would understand 'receiving...a geographic area limitation' to mean 'a geographic area limitation supplied by a user for limiting the search for matching objects.'" Ex. AA, IPR2022-01266, Patent Owner's Preliminary Response at 15 (PTAB Nov. 4, 2022). Now, despite explicitly endorsing a construction very similar to Toyota's proposed construction before the PTAB, and without any explanation for its inconsistency, IV argues that the construction should be rejected.

While IV purports to disagree with Toyota's proposed construction, its only substantive argument is directed to the phrase "for limiting the search for matching objects." IV Brief at 23-24. Therefore, in the interest of simplicity, Toyota would agree to the alternative construction "a geographic area supplied by a user." This alternate construction omits the only phrase to which IV objects, is supported by the specification of the '608 Patent, and is the same construction adopted by the Western District of Texas. Ex. I, Memorandum in Support of Claim Construction Order at 59-61, *IV v. GM* (Sept. 1, 2022). Toyota would also agree to the exact construction provided by IV in IPR2022-01266 ("a geographic area limitation supplied by a user for limiting the search for matching objects"). Ex. AA, IPR2022-01266, Patent Owner's Preliminary Response at 15 (PTAB Nov. 4, 2022).

The specification of the '608 Patent establishes that Toyota's construction is correct. In differentiating the invention of the '608 Patent over the prior art, the specification observes that "[o]ther services like On-Star® provide location-based information in response to traveler-

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initiated requests . . . . However, none of these location-based information providers are believed to specifically tailor such attribute-based and location-based information to the specific expressed profile or preferences of the mobile traveler that will receive such information." '608 Patent at 2:36-46. "The *present invention*," on the other hand, is "based on a location-based and preference-based system that matches *the specific expressed interests and preferences of a user* with the profile of a person, place or thing is unique and an improvement over the prior art." *Id.* at 3:41-48 (emphasis added). Further, "[t]he preferences may include additional information such as: *a distance range from the user . . . ." Id.* at 3:62-64 (emphasis added); *see also* 8:22–34 ("The system and method of the present invention thereby allows users to indicate their preferences….[e]xamples of parameters that may be used include…the maximum distance that the user is willing to travel"), 14:55–59 ("when others come within their *selected* geography *distance* to the particular site"), Figure 3 and 4A (user preference profile including "distance" preference (e.g., within 10 miles)). Thus, in contrast to prior art systems, the present invention allows users to be notified and provided information of persons, places or things that expressly match a user's explicit preferences and are within a user's prescribed geographic area. *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-45 (Fed. Cir. 2001) (construing patent claim consistent with the specification's explanation of "the present invention"). Given the express language of the patent and that IV has advocated the very same position, Toyota's construction should be adopted.

I.   '158 Patent

   1.   **"a processing component […] configured to [control/determine] an integration time of each [sensor/channel of the plurality of channels]" (claims 1 and 9)**

Plaintiffs' Proposed Construction	Defendants' Proposed Construction

"a processing component configured to independently control an integration time of each sensor" (Claim 1, District Court) "a processor that controls the integration time of the sensor included in each respective channel" (Claim 1, PTAB)	"a processor that controls the integration time of the sensor included in each respective channel" (Claims 1 and 9) Alternatively "a processor that controls the integration time of each sensor" (Claim 1)
"a processing component configured to independently determine an integration time of each channel of the plurality of channels" (Claim 9, District Court) "a processor that controls the integration time of the sensor included in each respective channel" (Claim 9, PTAB)	"a processor that determines the integration time of each channel of the plurality of channels" (Claim 9)

Toyota proposes that this Court construe the "processing component" terms consistent with IV's own construction and arguments during IPR briefing for the '158 patent. In particular, in a preliminary response in IPR2022-00710, IV distinguished a prior art reference named Nakajima. It argued that "Petitioner has suggested that these limitations could be met by a processor that controls only a single sensor," but IV disagreed. Ex. BB, IPR2022-00710, Patent Owner's Preliminary Response at 20 (PTAB July 27, 2022). Instead, IV argued that "[t]he specification expressly teaches that '[t]he processor … provides integration time control for each of the camera channels'" and that, "by providing the integration times to each camera channel, the processor is able to 'separately and simultaneously control an integration time of each channel'" *Id.* (citing '158 patent, 8:33-37, 5:5-11). Accordingly, IV argued:

> a person of ordinary skill in the art would understand "a processor configured to control an integration time of each sensor" as recited in independent Claim 1, and "the processing component is configured to determine an integration time of each channel" recited in independent claim 9, to mean that the processor controls the integration time of the sensor included in *each* respective channel.

Id. at 20-21 (emphasis in original). Thus, IV made clear that the processing component limitations could not be met by a processor controlling only one sensor's integration time—it must be a processor controlling the integration time of the sensor in *each* channel. To ensure that Toyota's construction hews precisely to what IV argued, Toyota has provided a clarification to its construction using the very same "processor" language that IV used in its own IPR construction.

While IV does not address the actual dispute related to the scope of this limitation, the dispute is clear: whether the term can include a processor that merely controls a sensor in one channel, which IV distinguished, or whether it must include a processor that controls a sensor in "*each*" of the respective channels, as IV argued. *Ekchian v. Home Depot, Inc.*, 104 F.3d 1299, 1304 (Fed. Cir. 1997) ("by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover, he is by implication surrendering such protection."); *Aylus Networks, Inc. v. Apple Inc.,* 856 F.3d 1353, 1360 (Fed. Cir. 2017) ("It follows that we should apply the doctrine [of prosecution disclaimer] in IPR proceedings before the PTO. Extending the prosecution disclaimer doctrine to IPR proceedings will ensure that claims are not argued one way in order to maintain their patentability and in a different way against accused infringers."). Toyota respectfully requests that the Court resolve this dispute by holding IV to the arguments it made to the Patent Office.

Not only is Toyota's construction precisely what IV argued, it is also consistent with the specification. For example, the specification describes an "image processor" that includes an "integration time controller" that "provides integration time control for each of the camera channels." '158 patent at 8:32-38; *see also* Fig. 3. This even further reinforces that IV should not be permitted to deviate from its arguments in the intrinsic record.

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IV argues that Toyota's construction is somehow deficient because it treats claims 1 and 9 similarly, but that is precisely how *IV* argued the terms should be construed in the '158 patent IPR. Ex. BB at 20-21. Nevertheless, Toyota proposes alternate constructions above that modify IV's original language to tailor the constructions more closely to the language of claims 1 and 9. With either construction, the dispute remains the same and should be resolved (for claim 1, whether the processor must control *each* sensor and for claim 9, whether the processor must determine the integration time of *each* channel).

Finally, IV argues that the PTAB has already construed the "processing component," limitations, but the portions quoted by IV were discussed in reference to the "optics components" limitations of claim 1, not a construction of "processing component." *See* Ex. H, IPR2022-00710, Institution Decision at 11-13 (PTAB Oct. 26, 2022). Nevertheless, the PTAB's statements do not change that *IV* distinguished the prior art, and it should not be able to avoid its own concessions by citing to dicta related to another claim term.

With respect to IV's construction, IV simply seeks to add a new "independently" limitation. In a related IPR with Honda, IV has explained that it believes this new "independent[]" limitation means that the control of the integration time for multiple sensors cannot be set together, even if it is controlled by a single processor. *See* Ex. CC, IPR2022-01338, Patent Owner's Preliminary Response at 31-33 (PTAB Nov. 3, 2022). And in its briefing, IV similarly seeks to import language from the specification related each channel "operat[ing] *independently under a different integration time.*" IV Br. at 25 (quoting '158 patent at 4:21-24). But such a requirement is inconsistent with the claims and specification. First, neither claim refers to "independent" control of different integration times for each sensor. Second, dependent claims make clear that the independent claims do not include an "independent" requirement of different integration times.

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Specifically, dependent claims 11 and 16 require that the channels be set to different integration times, meaning that there is no prohibition on the independent claims being set to the same integration time. Finally, the specification also makes clear that in certain embodiments, "each channel can have the same configuration" as another channel, going so far as to describe situations where "the camera channels are all identical to one another." '158 patent at 7:40-44. Even in the portion of the specification quoted by IV, the patent merely states that "the integration time of the sensors associated with each color can be varied," not that it must be. *Id.* at 4:25-28. Moreover, elsewhere the specification states that "[v]arious other combinations of integration times among the channels are possible under the description herein," further showing that there is no requirement that the integration times be independent or different. *Id.*, 10:21-23. Because IV's construction improperly adds a new limitation and is inconsistent with the claims and specification, it should be rejected.

2.   "image capture device" (claims 1 and 15)

Toyota agrees that "image capture device" need not be construed and should be accorded its plain and ordinary meaning.

3.   "integration time" (claims 1, 9, and 15)

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning, no construction necessary	Plain and ordinary meaning, i.e., "the time the image sensor collects and integrates signal from the scene"

Toyota's construction of "integration time" is consistent with the patent's definition for the term. In particular, the '158 patent states that "[t]he amount of integrated photo-charge is directly related to the time the image sensor collects and integrates signal from the scene. ***This is known***

as the integration time." '158 patent, 4:3-6 (emphasis added). Thus, the specification expressly defines "integration time" as the time an image sensor collects and integrates signal.

This well understood meaning of "integration time" is echoed in the prior art. *See, e.g.*, Ex. DD, U.S. 6,097,021 at 2:26-37 ("An optical sensor generally requires a finite amount of time in which to produce a usable electrical signal in response to electromagnetic energy striking the photodetector. This time period is the integration period and can vary from as little as a few seconds to minutes in duration."); Ex. EE, CCD Glossary of Terms at 3 ("Integration" = "[t]he accumulation of photo-generated charge within the pixels of a CCD image sensor," "Integration time"= "The time or the proportion of the operating cycle of the CCD in which charge is accumulated"). Despite the patent's clear definition, and the guidance in the prior art, IV insists that the term "integration time" refers to a "sampling method to make adjustments 'to create optimal pictures,'" but the '158 patent never uses the term "sampling method," and IV does not identify any way in which Toyota's construction is inconsistent with the commonly understood meaning of the term.

Toyota's proposed construction should be adopted to clarify the term "integration time" and to avoid juror confusion. See, *e.g.*, *Kroy IP Holdings, LLC v. Safeway, Inc.*, No. 2:12-cv-800-WCB, 2014 WL 3735222, at *2 (E.D. Tex., July 28, 2014) (stating court will consider construction that assists jury in understating terms). Providing a construction of "integration time" clarifies that the term refers to the charge being stored when a sensor is exposed to light and will assist the jury in understanding the "integration time" is not associated with the time it takes to combine the data from different sensors into a single image. Further, in the GM case, the Western District of Texas has already construed "integration time" to mean "the time the image sensor collects and integrates signal from the scene." Ex. I, Memorandum in Support of Claim Construction Order, *Intellectual*

Ventures I LLC v. General Motors Co., No. 6:21-cv-01088-ADA, ECF No. 83 (W.D. Tex. Oct. 19, 2021).

For all of these reasons, the Court should adopt Toyota's proposed construction.

III. CONCLUSION

For the reasons explained above, Toyota's proposed constructions should be adopted.

Dated: December 23, 2022   Respectfully submitted,

By: /s/ James R. Barney

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CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing document was served on all parties

who have appeared in this case on December 23, 2022, via the Court's CM/ECF system.

/s/ Ashley B. Dial